

## **ABSTRACT**

A method and apparatus for identifying and analyzing high power dissipation peaks across a switching device. The method and apparatus include  
5 processing voltage waveform data associated with a switching device to determine switching edge and slope parameters for each of a plurality of switching cycles, and identifying those portions of the voltage waveform data associated with switch state transition portions of the plurality of switching cycles. For a plurality of the identified switch state transition portions, respective  
10 peak power levels are calculated using portions of the voltage waveform data temporally corresponding to the plurality of identified switch state transitions, and portions of current waveform data associated with the switching device temporally corresponding to the plurality of identified switch state transitions.